

ABSTRACT OF THE DISCLOSURE

A method and system for transferring a queue of packets in a router between an inbound controller and an outbound controller is disclosed. The inbound controller is adapted for receiving an inbound packet at an inbound port. In addition, a plurality of inbound queues are provided for the inbound port. An inbound packet is then received at the inbound port. The inbound packet is classified in a selected one of the plurality of inbound queues according to packet sorting criteria. The inbound packet is then stored in the selected one of the plurality of inbound queues. The inbound controller is capable of determining when one of the plurality of inbound queues is ready to be moved to an outbound queue which is capable of storing a multiplicity of inbound queues. The outbound controller is adapted for forwarding packets at an outbound port. At least one outbound queue is provided for the outbound port which is capable of storing a plurality of inbound queues. The outbound controller is capable of receiving a notification to handle an inbound queue storing a plurality of packets. The inbound queue is then transferred to the outbound queue. The outbound controller may then transmit packets stored in the outbound queue. A CPU may control the inbound controller and the outbound controller.

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